

37. In a corrugated arch shape cross section chamber, for receiving and dispersing stormwater when buried in compactable media, wherein opposing chamber sidewalls run upwardly from the chamber base to the chamber top to define an arch shape cross section geometry having an inner height H , measured along the central vertical axis of the cross section, and an inner width W , measured horizontally at said base; the improvement which comprises: an arch shape cross section geometry which is a truncated semi-ellipse having a major axis lying along said vertical axis.

✓38. The improved chamber of claim 37, wherein the chamber has a width to height ratio (W/H) between about 0.5 to 1 and 2 to 1.

✓39. The improved chamber of claim 37, wherein W/H is between 1 to 1 and 2 to 1.

✓40. The improved chamber of claim 37, wherein the height H of the chamber is between about 44 and 48 percent of the length of the major axis of the ellipse of which the truncated semi-ellipse is a portion.

✓41. The chamber of claim 37, wherein the improvement further comprises an outwardly extending flange running along the base of each of said opposing sidewalls; and, a support member running upwardly from the outermost edge of each said flange.

✓42. The chamber of claim 40, wherein the improvement further comprises a plurality of connecting elements on each opposing side of the chamber, running transverse to the length of the chamber, from the support member to the sidewall of the chamber.

✓43. The improved chamber of claim 37 in combination with a domed endplate, wherein the endplate is engaged with an end of the chamber.

✓44. The improved chamber of claim 38 in combination with a domed endplate, wherein the endplate is engaged with an end of the chamber.

45. In a corrugated arch shape cross section chamber, for receiving and dispersing stormwater when buried in compactable media; the chamber having a length; wherein, opposing sidewalls run upwardly from the chamber base to the chamber top to define an arch shape cross section geometry having an inner height H measured along the central vertical axis of the cross section and an inner width W measured horizontally at said base; the improvement which comprises: an arch shape cross section geometry which is a continuous curve; and an outwardly extending flange running along the base of each of said opposing sidewalls; and, a support member running upwardly from the outermost edge of each said flange.

46. The chamber of claim 45, wherein the improvement further comprises a plurality of connecting elements on each opposing side of the chamber, running transverse to the length of the chamber, from the support member to the sidewall of the chamber.
